APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,352	12/01/2003	Isabelle M. Rouvellou	YOR920030519US1	1283

48355 7590 03/15/2007 MOSER, PATTERSON & SHERIDAN LLP IBM CORPORATION 595 SHREWSBURY AVE SUITE 100 SHREWSBURY, NJ 07702	**EXAMINER** FERNANDEZ RIVAS, OMAR F

ART UNIT	PAPER NUMBER
2129	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/725,352	ROUVELLOU ET AL.
	Examiner	Art Unit	
	Omar F. Fernández Rivas	2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 January 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-5,9-21 and 24-28</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-5,9-21 and 24-28</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some *   c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date <u>11/4/2004</u>.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

1.   This Office Action is in response to an RCE filed by the Applicant entered on

January 8, 2007.

2.   The Office Actions of May 5, 2006 and October 6, 2006 are incorporated into this

Non-Final Office Action by reference.

Status of Claims

3.   Claims 1, 17 and 24 have been amended. Claims 6-8, 22-23 and 29-30 have

been cancelled. Claims 1-5, 9-21 and 24-28 are pending on this application.

Claim Rejections - 35 USC § 102

4.   In light of the amendments made to the claims, the rejection under 35 USC 102

has been withdrawn.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 9-21 and 24-28 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Abrari et al in view of Serrano-Morales et al (US Patent #7,020,869,

referred to as **Abrari**; US Patent #6,965,889, referred to as **Serrano**).

Claims 1,17 and 24

Abrari teaches a method, a system and a computer readable media for authoring and executing an individualized language business rule (**Abrari**: abstract, C1, 19-32), comprising: creating at least one individualized language resource, said at least one individualized language resource being mapped onto at least one executable object (**Abrari**: C4, L51-67, C5, L1-11; C7, L25-47; C12, L50-53; Figs. 3, 6 and 17; defining a name for an entity is creating an individualized language resource as interpreted from paragraphs 9, 60 and 61 of the Application's specification. It is inherent that any variable or statement created to produce a function in a computer will be mapped into an executable object that the computer can interpret upon compilation); creating at least one individualized language rule referencing at least one of said individualized language resource (**Abrari**: C4, L63-67, C5, L1-11; C7, L63-67; C8, L1-6; C12, L50-53; Figs. 3, 6 and 17; developing business rules using the vocabulary); organizing said at least one individualized language resource and said at least one individualized language rule into at least one individualized language rule set (**Abrari**: C4, L51 to C5, L11; Fig. 1); and transforming said at least one individualized language rule into computer executable format (**Abrari**: C2, L23-65; C4, L34-67; C5, L1-42; C6, L19-38; in a computer system, all data must be transformed to computer executable format so that the computer can operate upon it).

Abrari does not teach creating at least one individualized rule template; and creating at least one individualized rule from said at least one individualized rule template.

Serrano teaches creating at least one individualized rule template (**Serrano**: abstract, L1-11, C3, L26-49); and creating at least one individualized rule from said at least one individualized rule template (**Serrano**: C4, L21-31).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by creating at least one individualized rule template; and creating at least one individualized rule from said at least one individualized rule template as taught by Serrano for the purpose of making it easier for a user to provide the appropriate data needed to create a rule.

Abrari does not teach scoping authored templates and rules based upon rule set input and output groups chosen by a user.

Serrano teaches scoping authored templates and rules based upon rule set input and output groups chosen by a user (**Serrano**: C2, L15-28; C3 to C4, L1-12; C6, L56 to C7, L51; C10 and 11, claims 1 and 11; the user edits the rule elements. By doing so, the user is constraining (scoping) the values that the rule elements of the template may contain).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by scoping authored templates and rules based upon rule set input and output groups chosen by a user as taught by Serrano for the purpose of setting constraints on the rules that will be created.

Claims 2, 18 and 25

Abrari teaches preventing a syntactically incorrect individualized language statement from being authored (**Abrari**: C10, L49-67; by checking and correcting the

completeness (syntax) of a rule, syntactically incorrect rules will not be created).

Claims 3, 19 and 26

Abrari teaches deploying said at least one transformed executable to a runtime

environment and executing said at least one transformed individualized language rule

(**Abrari**: C2, L23-65; C4, L34-39; the deployment platform used by the invention is a

runtime environment).

Claims 4, 20 and 27

Abrari teaches executing at least one non-individualized language rule (**Abrari**:

C4, L51-62; C6, L39-51; Figs. 1 and 2; integrating rules with diverse application

components (runtime environments) is executing a non-individualized language rule as

understood from paragraph 55 of the Application's specifications).

Claims 5, 21 and 28

Abrari teaches coordinating and cooperating by a runtime engine with other rules

engines in a runtime environment (**Abrari**: C6, L20-51; Fig. 2; interacting with various

business components).

Claim 9

Abrari teaches transforming said at least one of an individualized language

resource, an individualized language rule, an individualized rule template, and

individualized language rule set into a standardized format (**Abrari**: C6, L19-51; Fig. 2).

Claim 10

Abrari teaches at least one individualized language rule set influences at least

one of application behavior and application state (**Abrari**: C8, L7-11; C20, L63-67, C21,

L1-20; Fig. 6; executing an action when a condition is met influences an application's behavior and state).

Claim 11

Abrari teaches directly or indirectly linking an application to an execution of at least one individualized language rule set (**Abrari**: abstract; C8, L7-44; C20, L63-67, C21, L1-20; Fig. 6).

Claim 12

Abrari does not teach creating a type-safe linkage between an application and said at least one individualized language rule set.

Serrano teaches creating a type-safe linkage between an application and said at least one individualized language rule set (**Serrano**: C2, L15-28, C3, L35-67; Fig. 1A; the rule elements define the rule structure and the application applying the rule must use (are linked) these rule elements).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by creating a type-safe linkage between an application and said at least one individualized language rule set as taught by Serrano for the purpose of providing the application with the correct data to apply a given rule.

Claim 13

Abrari teaches deploying said type-safe linkage in a runtime environment (**Abrari**: C4, L34-39; C10, L17-67; a computer system performs its operations in a

runtime environment).

Claim 14

Abrari teaches finding, updating and deleting an item contained within said standardized format (**Abrari**: C6, L52-63; to modify (update or delete) a rule it must be found).

Claim 15

Abrari does not teach employing said type-safe linkage to select said at least one individualized rule set based on externalized criteria.

Serrano teaches employing said type-safe linkage to select said at least one individualized rule set based on externalized criteria (**Serrano**: C2, L15-28; C3, L55-67; C4, L5-12; selecting the rules based on the inputs given by the user).

It would have been obvious to one of ordinary skill in the arts at the time of the applicant's invention to modify the teachings of Abrari by employing said type-safe linkage to select said at least one individualized rule set based on externalized criteria as taught by Serrano for the purpose of allowing the system to determine which rule can operate on a given input data.

Claim 16

Abrari does not teach transforming said type-safe linkage into a standardized format.

Serrano teaches transforming said type-safe linkage into a standardized format (**Serrano**: C4, L43-63).

It would have been obvious to one of ordinary skill in the arts at the time of the

applicant's invention to modify the teachings of Abrari by transforming said type-safe

linkage into a standardized format as taught by Serrano for the purpose of making the

data types used by the rules compatible with different applications.

Response to Applicant's arguments

In reference to Applicant's arguments on page 7:

The Examiner's attention is respectfully directed to the fact that Abrari fails to
teach, show or suggest the novel invention of creating at least one individualized
language resource (i.e., individualized vocabulary term) by scoping rules and rule
templates in accordance with user input or selections, as positively claimed in the
Applicants' amended independent claims 1, 17 and 24.

Examiner's response:

The claims and only the claims form the metes and bounds of the invention. The

Examiner has full latitude to interpret each claim in the broadest reasonable sense.

As stated in the rejection of claims 1, 17 and 24 above, defining a name for an

entity is creating an individualized language resource as interpreted from paragraphs 9,

60 and 61 of the Application's specification. Moreover, business rules are developed

using these language resources, or vocabulary terms.

Serrano teaches the scoping of rules and rule templates in accordance with user

inputs or selections. The user can edit the rule elements of the templates. The user

can select the values that the rule elements of the template may contain, therefore

constraining or scoping the rule elements of the templates.

In reference to Applicant's arguments on pages 10-11:

As discussed above, Abrari does not teach, show or suggest creating at least one individualized language resource (i.e., individualized vocabulary term) by scoping rules and rule templates <u>in accordance with user input or selections</u>, as claimed by the Applicants in independent claim 1. Serrano-Morales does not bridge this gap in the teachings of Abrari. Specifically, Serrano-Morales also does not teach, show or suggest scoping rules and rule templates <u>in accordance with user input or selections</u>. The portions of Serrano-Morales that the Examiner cites to teach this limitation, by contrast, teach defining, <u>by a rule element provider</u>, rule elements (e.g., <u>operators, variables, constants, conditions, actions</u>) that may or may not be chosen by a user (See, e.g., Serrano Morales, column 3, lines 50-52: "<u>Rule element providers</u> define a set of choices that a user may choose for a particular editable rule element defined by a template", emphasis added). This is not the same as scoping a <u>vocabulary</u> for authoring a rule. Moreover, the limitations as to which rule elements may or may not be chosen are not dictated <u>by the user</u> or the user's choices, but are rather dictated <u>to the user</u>. As such, the Applicants submit that claim 1 is not made obvious by the teachings of Abrari in view of Serrano-Morales. Therefore, the Applicants submit claim 1 fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder.

Examiner's response:

The claims and only the claims form the metes and bounds of the invention. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

The rule elements provider of Serrano provides the editable rule elements of the template to the user. The user is then able to set values for the different rule elements in the template, therefore setting constraints (or scope) on the template (**Serrano**: C2, L15-28; C3 to C4, L1-12; C6, L56 to C7, L51; C10 and 11, claims 1 and 11). It is the user's selections (inputs) on the rule elements that scope the rules.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haley US Patent Application Publication #2004/0030421

Zhang et al US Patent #7,114,146

7.   Claims 1-5, 9-21 and 24-28 are rejected.

Correspondence Information

8.   Any inquires concerning this communication or earlier communications from the

examiner should be directed to Omar F. Fernández Rivas, who may be reached

Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at

(571) 272-2589 or email omar.fernandezrivas@uspto.gov.

If you need to send an Official facsimile transmission, please send it to (571) 273-8300.

    If attempts to reach the examiner are unsuccessful the Examiner's Supervisor,

David Vincent, may be reached at (571) 272-3080.

Hand-delivered responses should be delivered to the Receptionist @ (Customer

Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located

on the first floor of the south side of the Randolph Building.

Omar F. Fernández Rivas
Patent Examiner
Artificial Intelligence Art Unit 2129
United States Department of Commerce
Patent & Trademark Office

Wednesday, March 07, 2007

3/12/07

DAVID VINCENT
SUPERVISORY PATENT EXAMINER